

CLAIMS

What is claimed is:

1. An interface for linking one or more applications to a plurality of databases comprising:
a plurality of nodes to retrieve data from said one or more databases and to provide said data to said one or more applications in a consistent manner; and
one or more services to perform predefined actions associated with said nodes,
wherein each node may be associated with several different services and each service may be associated with several different nodes.
2. The interface as in claim 1 wherein one of said applications is a graphical user interface ("GUI").
3. The interface as in claim 2 wherein said GUI comprises a menu navigation hierarchy for navigating through a plurality of multimedia content and associated information.
4. The interface as in claim 3 wherein an individual node is associated with each menu item in said menu hierarchy.
5. The interface as in claim 4 wherein said GUI further comprises an information region containing information associated with each menu item when said menu item is selected by a user, said information being provided by said individual node associated with said menu item.

6. The interface as in claim 4 wherein certain menu items in said hierarchy have sub-menu items associated therewith, and wherein each parent node associated with said certain menu items identify children nodes associated with each of said sub-menu items when said certain menu items are selected by a user.

7. The interface as in claim 1 wherein a first type of said plurality of nodes retrieves data from a first type of database and a second type of node retrieves data from a second type of database.

8. The interface as in claim 7 wherein said first type of database is an electronic program guide (EPG) database and said second type of database is a CD database.

9. The interface as in claim 4 wherein said EPG database is transmitted over a live EPG feed from a cable/satellite provider.

10. The interface as in claim 1 wherein one service is a "record program" service associated with all nodes containing information related to live multimedia broadcasts.

11. The interface as in claim 1 wherein one service is a "tune to channel" service associated with all nodes containing information related to live multimedia broadcasts.

12. The interface as in claim 4 wherein a list of services associated with each individual node may be generated by highlighting said menu item associated with said node and generating an "action" command.

13. The interface as in claim 1 wherein one of said nodes is configured to retrieve Internet data.

14. A data interface layer within a multimedia system for providing data from a plurality of different multimedia databases to one or more applications comprising:

a first data interface object adapted to retrieve a first set of data from a first one of said databases and provide said data to said applications;

a second data interface object adapted to retrieve a second set of data from a second one of said databases and provide said data to said applications,

wherein said data is provided to said applications from both said first data interface object and said second data interface object in a consistent manner.

15. The data interface layer as in claim 14 wherein said data is provided to said applications from both said first data interface object and said second data interface object via a consistent application programming interface (API).

16. The data interface layer as in claim 14 wherein said data interface objects are nodes.

17. The data interface layer as in claim 14 further comprising:

a first service associated with both said first and second data interface objects.

18. The data interface layer as in claim 17 further comprising:
a second service associated with only one of said first and second data interface objects.

19. The data interface layer as in claim 17 wherein said first service is a search service allowing a user to search for data related to said first and/or second data object.

20. The data interface layer as in claim 14 wherein said first one of said databases is an electronic program guide (EPG) database containing information related to broadcast programs and said second one of said databases is a CD database containing CD-related information.

21. The data interface layer as in claim 14 wherein one of said applications is a graphical user interface (GUI).

22. The data interface layer as in claim 21 wherein said GUI comprises a plurality of menu items in a menu hierarchy and wherein a first menu item is associated with said first data interface object and a second menu item is associated with said second data interface object.

23. A system comprising:
a plurality of disparate databases containing data related to multimedia content and/or Internet content;
a plurality of applications to access and process data from said databases;
and

a node layer comprising a plurality of nodes including a first type of node adapted to retrieve data from a first type of database and a second type of node adapted to retrieve data from a second type of database, wherein both said first type of node and said second type of node provide said data to said applications in a consistent data format.

24. The system as in claim 23 wherein said consistent data format is enabled via a consistent application programming interface (API) enabling communication between each of said applications and said first and second types of nodes, respectively.

25. The system as in claim 23 further comprising:

a service layer comprised of a plurality of service objects adapted to perform actions on said nodes, wherein a single service object may perform actions for a plurality of nodes.

26. The system as in claim 25 wherein each node may be associated with a plurality of services.